

Title (en)
Image forming apparatus

Title (de)
Bildformungsgerät

Title (fr)
Appareil de formation d'images

Publication
EP 1213152 A3 20030625 (EN)

Application
EP 01309715 A 20011116

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JP 2000353491 A 20001120

Abstract (en)
[origin: EP1213152A2] An image forming apparatus according to the present invention comprises medium-conveyance means (18) having a conveyance surface (26) that moves at a speed V along a conveyance reference surface, and a plurality of liquid ejecting heads (13) disposed in the movement direction of the conveyance surface (26). Associated with the maximum value of variations of the height of the conveyance surface (26) with respect to the conveyance reference surface, the maximum error amount of the thickness of the print medium (17) and the maximum amount of relief from the conveyance surface (26), the maximum height H_{CX} of the cockling produced on the print medium (17), and a cockling height after passage of a predetermined time since the liquid is firstly ejected to the print medium with the aid of the upstream liquid ejecting heads (13) a gap between the ejection opening surface (16) of the liquid ejecting heads (13) located on the downstream side and the conveyance surface (26) is set, and the distance L between the upstream and downstream liquid ejecting heads (13) is set shorter than $(V/V_{CX})H_{CX}$, and further the predetermined time is set to L/V. Hereby, the gap between the ejection-opening surface of the liquid ejecting head and the print medium in the image forming apparatus can be narrowed to the minimum.

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Citation (search report)
• [A] US 5608439 A 19970304 - ARBEITER JASON R [US], et al
• [A] EP 0650846 A2 19950503 - HEWLETT PACKARD CO [US]
• [A] EP 0622227 A2 19941102 - TOKYO ELECTRIC CO LTD [JP]
• [A] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 10 31 August 1998 (1998-08-31)

Cited by
EP1636041A4

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